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SUSTAINABLE CONSUMPTION AND RECYCLING OF HOUSEHOLD WASTE IN BULGARIA

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Abstracts

Surveys on consumer attitudes and perceptions to sustainable consumption are very scarce in Bulgaria. The main reason for this is the limited examples of sustainable consumption which are narrowed predominantly to the purchase of goods (foodstuffs) with eco-labelling, electric devices with a high class of energy efficiency and the separate collection of packaging waste.

In order to fill the gap in similar research among Bulgarian consumers the perceptions, expectations and the attitudes to eco-labelling related to separate collection of packaging waste were analysed with the method of “focus groups”. The results of the conducted survey among citizens from big Bulgarian cities show that the individual attitudes to sustainable behaviour in the country are not prevailing.

Key words: Sustainable consumption, consumer attitude, separate collection of waste, Bulgaria

INTRODUCTION

Unsustainable production and consumption are at the root of environmental problems such as climate changes, depletion of the natural resources, air pollution, waste increase, etc. In response to all this sustainable production and consumption gain more and more attention in the political agenda of Europe [1, 2]. In July 2008 the European Commission presented and Action Plan for Sustainable Consumption and Production and Sustainable Industrial Policy [3]. It is a dynamic policy aiming to improve the energy and environmental performance of products and enhance consumers' awareness.

Individual behaviour has significant direct and indirect impact on the environment as a whole. Changing the pattern of behaviour of individuals and households can lead to a significant impact on the environment.

In Bulgaria the survey on consumer attitudes and perceptions to sustainable consumption are extremely scarce. The main reason for this is the limited examples of sustainable consumption which are narrowed predominantly to the purchase of goods (foodstuffs) with eco-labelling, electric devices with a high class of energy efficiency and the separate collection of packaging waste.

In order to fill the gap in such research among Bulgarian consumers the authors set *the aim to analyse the perceptions, expectations and the attitudes to eco-labelling related to separate collection of packaging waste.*

METHOD OF RESEARCH

In order to identify the perceptions, expectations and attitudes to eco-labelling related to packaging the method of “focus groups” was used. During the survey 5 focus groups were set up: three in the city of Sofia (“Sofia 1” focus group, “Sofia 2” focus group and “Sofia 3” focus group), one in the town of Plovdiv (“Plovdiv” focus group) and one in the town of Varna (“Varna” focus group). They were organised in the period November 2008 – January 2009, and the five sessions were conducted in one and the same manner in compliance with preliminarily prepared instructions.

The participants of the focus group were chosen after an initial selection in order to comply with the demographic profile summed up by the National Statistics Institute for each town – Sofia, Plovdiv and Varna [4].

The total number of respondents was *46 people (15 men and 31 women)*. 45.65 % of them have secondary education, the rest – have higher education. Most of the respondents are of working-age (91.30 %). More than half of them (56.52 %) were 25 years old, 17.39 % - were between 25 – 35 years old, 13.04 % - between 36 – 45 years old, 8.70 % - over 55 years and only 4.35 % - between 46 - 55 years old. The predominant part of the respondents were married - 67.39 %. The average wage of 6.52 % of the respondents is up to 300 levs, of 23.91 % - between 301 - 500 levs, of 28.26 % - between 501 - 700 levs, of 17.39 % - between 701 - 900 levs and of 13.05 % - above 900 levs. The general demographic characteristics of all the respondents in the survey are described in Table 1.

Table 1. Demographic characteristics of the respondents in the survey

	Number of participants in the focus group			Total	
	City of Sofia	Town of Plovdiv	Town of Varna	Number	Relative Number %
Sex					100.00
Men	8	3	4	15	32.61
Women	20	7	4	31	67.39
Age					100.00
under 25 years	20	5	1	26	56.52
25-35 years	3	2	3	8	17.39
36-45 years	3	-	3	6	13.04
46-55 years	-	2	-	2	4.35
over 55 years	2	1	1	4	8.70
Education					100.00
Higher	11	6	6	23	50.00
College	1	-	1	2	4.35

Secondary	16	4	1	21	45.65
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Twenty eight respondents were included in the survey in the city of Sofia divided in three focus groups. One of the groups (“Sofia 3” focus groups) was formed only by students. Six (21.43 %) of all the respondents in Sofia answered “no” to the question “Do you have a container for separation and disposal of recyclable waste near your home?”

The remaining 18 respondents (39.13 %) formed “Plovdiv” focus group and “Varna” focus group. Six of the respondents in them (33.33 %) do not have containers for separation and disposal of recyclable waste near their homes.

RESULTS AND DISCUSSIONS

The respondents in the survey shared their opinion on a number of questions in the field of sustainable consumption and more specifically the separation and disposal of recyclable waste.

The concepts of „sustainable development” and „sustainable consumption” through respondents’ perspective

Stressing the complexity of the problem, *Bulgarian consumers cannot integrate all the parameters of the concept of “sustainable consumption” in their behaviour and in their choice of products.* Even if they initially define themselves as sensitive to the environmental protection issues they *do not recognise spontaneously the concept of sustainable consumption*, and they do not associate simultaneously its three aspects – society, economics and the environment.

What are the “ecological models of consumption” in Bulgaria?

Most of the respondents in the survey express the opinion that it is difficult to speak of an “*ecological model of consumption*” but they can point out some *examples (“instances”) of reasonable consumption.*

Examples of ecological consumption albeit unpopular in Bulgaria were described during the survey. They can be grouped as follows:

- **Group 1. Generating less waste** – the use of recyclable packaging and the forestalling of generation of waste; separation and disposal of recyclable waste; the collection of clothes and textile waste in special containers; the use of products made from recycled materials; actions following the slogan “Repair, don’t throw away!”;
- **Group 2. Water and energy consumption** – the purchase of electrical appliances with a high class of energy efficiency and low energy consumption; the construction and building of ecological houses with solar panels;
- **Group 3. Foods** – the consumption of organic foods; the purchase of local foods which saves transportation costs and the natural result of this being the reduction of environmental pollution from harmful gasses;

- **Group 4. Shopping** – restricted use of plastic bags for shopping; purchase of ecological non-food products; participation in company initiatives for recycling of old mobile phones, major and minor household appliances;
- **Group 5. Transport (Mobility)** – the use of bio-fuels; the use of eco-natural gas for automobiles.

What are the eco-labels concerning packaging associated with?

According to the Bulgarian respondents in the survey the aim of eco-labelling is to inform the consumers, to motivate for “eco” actions and to lead to environmental protection and reduction of the use of natural resources.

The participants in the focus groups associate eco labels concerning packaging with the separate collection of waste which aims to facilitate their recycling and processing. Most of them recognise the “*Mobius Strip*” sign (Fig. 1) and correctly define its role to inform about the characteristics of the packaging pointing to the type of the used material.



Fig. 1. Sign of identification of the packaging material
(“*Mobius Strip*”)

The participants in the focus groups from the bigger towns of Bulgaria (Sofia, Plovdiv, and Varna) are doubtful that most of Bulgarian consumers recognise the labelling concerning packaging. They believe that it is the producers and importers who recognise eco-labelling due to their obligations following from the legal and statutory framework about separate collection of waste.

The respondents classified eco-labels as follows:

- *International and national* – the respondents believe that international organisations and/or government authority set up the requirements referring to labelling and packaging;
- *obligatory and voluntary* – the respondents perceive putting eco labels as the obligation of producers due to the legal and statutory requirements; for other participants the sign carries information about the company’s awareness of environmental protection;
- *public and private* – the signs put on packaging with the aim of identifying the organisations fulfilling the aims of recycling and processing of packaging waste are not known to consumers (e.g. the “Green point” sign).

While shopping do you look for eco-labelling (logo) on the tag, the packaging respectively, which gives information about the material from which it is made?

The efficiency of eco-labelling concerning the packaging is closely connected to the reduction of packaging waste and its separate collection. The results of the present survey

show that *consumers do not pay special attention to labelling concerning packaging while shopping*. They are more interested in the labelling referring to the product itself (ingredients, expiry date) and its quality and safety. The information which the labelling concerning packaging has does not influence their decision in purchasing.

A small part of the participants in the focus groups point out that the labelling concerning packaging plays an important role in purchasing but very often it is invalidated by the *insufficient organisation of the separate collection of packaging waste in some residential places*. Extremely unmotivating is the *mixing of waste form different containers and their disposal together*.

Is there enough information about eco-labelling?

The citizens of major towns who participated in the survey maintain the opinion that the information about eco-labelling of packaging and the separate collection of packaging waste is insufficient. The efforts to give information and education made by the organisations for utilisation of packaging waste are acknowledged but their regularity, accessibility and relevance are mistrusted. According to the expressed opinions the message of the eco-labelling should be accessible/explicit, clear, well directed and presented in an adequate way in order to reach the consumer. A conclusion can be drawn that *the sources of information should win the trust of consumers through their personal skills*.

Separate collection of packaging waste and environmental protection

Consumers in the country see a direct link between the separate collection of waste packaging and environmental protection. This is a way to ensure resources for the manufacturing of an extensive range of products from recycled materials and to preserve natural resources, to generate energy and, of course, to reduce waste.

Do you think that Bulgarian consumers will change their current behaviour with regard to the separate collection of packaging waste?

More than half of the respondents in the survey think that the Bulgarian consumer and especially younger people *will change the pattern of behaviour with respect to the separate collection of packaging waste*. They point out the role of information and education about separate collection of packaging waste in facilitating consumers.

Pessimistic are one third of the participants in the focus-groups, and some of them express extreme opinions such as „there is hope but in few generations’ time”.

CONCLUSIONS

The results of the conducted survey among citizens from major cities show that *the individual attitudes to sustainable behaviour in the country are not prevailing*. Irrespective of the fact that consumers see a direct link between the separate collection of packaging waste and environmental protection their belief is coupled with doubts about the aims of eco-labelling and eco-actions resulting from it.

The contextual factors do not have a positive influence on consumers in the country for separate collection of waste either. The absence of economic and financial tools for stimulation and the weakness of the organisation (insufficient number of containers, unsuitable places for their location, mixing the waste during its disposal, etc.) are also demotivating.

Ecologically significant individual consumer behaviour such as the separate collection of packaging waste can be achieved by influencing simultaneously the *internal factors* (attitude) and *external factors (context)*. To this end it is necessary to set up an effective government policy which would direct the efforts of all stakeholders to the implementation of *separate collection of packaging waste as a pattern of sustainable consumption in Bulgaria*.

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